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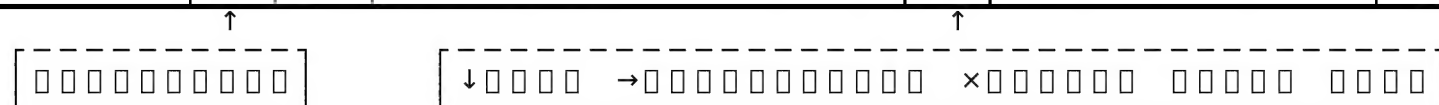
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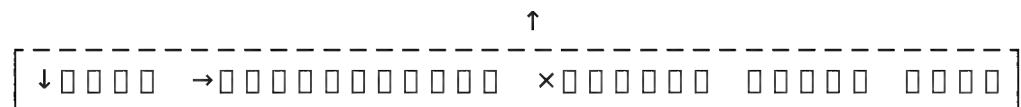
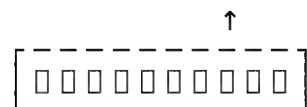
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Diagram illustrating the structure of the input and output vectors for the proposed algorithm. The input vector is a 1x10 vector of squares. The output vector is a 1x20 vector of squares, with the first 10 squares grouped by a dashed line and the next 10 squares grouped by a dashed line. An upward arrow points to the input vector, and another upward arrow points to the output vector. The output vector is divided into two groups of 10 squares each, with a dashed line separating them. The first group contains a downward arrow, and the second group contains a rightward arrow and a multiplication symbol.

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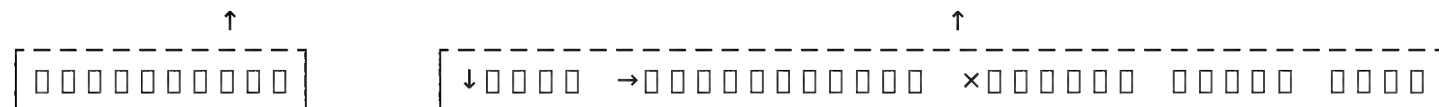
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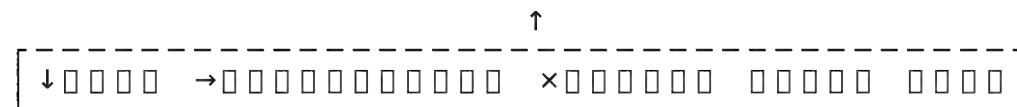
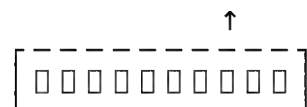
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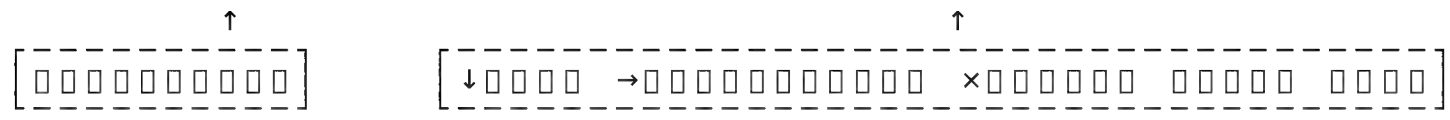
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A horizontal dashed line represents a 1D lattice with 10 sites. Each site is marked by a small vertical rectangle. An arrow points to the 6th site from the left, which is labeled '6'.

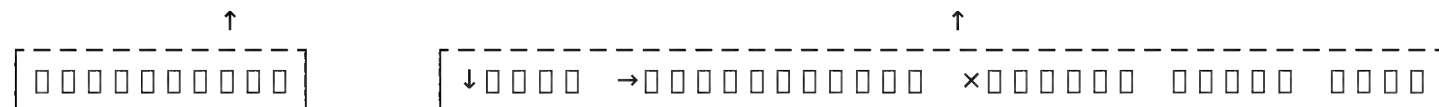
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